

Listing of the claims:

1. (previously presented) Apparatus for routing a telephone call by a caller to a called telephone, to a data network, the apparatus comprising:

(a) a memory for storing a category of telephone numbers representing telephone calls to be placed over a data network in packet switched format;

(b) processing means for accepting a dialed telephone call directly from a device initiating said call, and for determining whether a called number of said call is within said category, and for routing said call through an originating gateway to said data network if so; and

(c) means for selecting, after said called number of said dialed call is determined to be within said category, said originating gateway from plural originating gateways each being capable of conveying said call to said data network, wherein said processing means determines whether said call is routed more economically over said data network or over a telephone network, and wherein said called telephone is accessible over either network.

2. (previously presented) Apparatus of claim 1 connected to a data network, wherein said memory stores information concerning which of said plural originating gateways to utilize to access said data network.

3. (previously presented) Apparatus of claim 2 wherein said each of said originating gateways is capable of communicating over said data network to plural terminating gateways.

4. (original) Apparatus of claim 1 wherein said category is comprised of all calls outside of an area code in which the call originates.

5. (original) Apparatus of claims 3 connected via a data network to an operations center, said operations center being capable of altering information stored within said memory and implementing changes to said category of telephone numbers.

6. (original) Apparatus of claim 4 connected via a telephone network to an operations center, said operations center being capable of altering information stored within said memory and implementing changes to said category of telephone numbers.

7. (previously presented) A method for routing a telephone call by a caller, comprising the steps of:

- (a) receiving, at a router, the call directly from a device initiating the call and examining a called telephone number associated with said call to ascertain whether a particular property is present;
- (b) if so, selecting one from plural originating gateways each being capable of conveying said call to a data network, and routing the call to said selected originating gateway, and if not, routing the call to a telephone switch; and
- (c) if said call is routed to said selected originating gateway, examining the called telephone number again to determine to which of a plurality of terminating gateways said call should be routed.

8. (original) The method of claim 7 wherein said originating gateway makes said determination of said terminating gateway in conjunction with other gateways.

9. (original) The method of claim 8 further comprising the step of reallocating traffic among plural terminating gateways.

10. (previously presented) A method of completing a telephone call by a caller, comprising the steps of:

- (a) receiving the call, at a router, directly from a device initiating said call and examining a dialed number associated with said call;
- (b) if said number is determined, by said examining, to be within a predetermined class of numbers, selecting one from plural originating gateways each being capable of conveying said telephone call to a data network, and conveying said telephone call to a first remotely located telephone switch over said data network; and
- (d) if said number is not within said predetermined class of numbers, conveying said telephone call to a second remotely located telephone switch over a telephone network.

11. (previously presented) The method of claim 10 wherein said first or second remotely located telephone switch is reached via either a telephone switch, a first terminating gateway, or a second terminating gateway, and wherein the determination of which of said first or second terminating gateways or said telephone switch is utilized to reach said first or second remotely located telephone switch is made at least in part by comparing a predetermined subset of digits contained in said dialed number.

12. (previously presented) A network for completing telephone calls, the network comprising a router connected directly to a device initiating said calls, the router being programmed to examine dialed numbers associated with calls to determine which of the calls shall be routed to a packet switching network, said router further being programmed to separate

long distance calls from local calls, to transmit some of said long distance calls and all of said local calls over a circuit switching network, and the remainder of said long distance calls over said packet switching network, and to select, for each specific long distance call to be transmitted over the packet switching network, one from plural of originating gateways each being capable of conveying said each specific call to said packet switching network after a dialed number associated with said specific call is examined.

13. (previously presented) The network of claim 12 wherein said selected originating gateway is in communication with said router for converting the specific dialed telephone call from a circuit switched calls to a packet switched call, and for routing same over said packet switching network.

14. (previously presented) The network of claim 13 further comprising a terminating gateway to convert telephone calls from a packet switching format on said packet switching network to a circuit switching format, and to place said calls in circuit switching format on said circuit switching network.

15. (original) The network of claim 14 wherein each of said terminating gateways incurs a charge as a result of terminating said calls, and wherein changes in such charges are utilized to update routing information stored in said router.

16. -18 (canceled)

19. (previously presented) A method for routing a telephone call by a caller over a data network comprising the steps of:

(a) receiving a dialed number associated with the call and examining said

dialed number by a router directly connected to a device initiating the call to determine whether the call shall be routed over said data network;

- (b) if yes, parking the dialed number at the router;
- (c) if the call is determined to be routed over said data network after said step of examining said dialed number, selecting one from plural originating gateways each being capable of conveying said call to said data network, and transmitting the dialed number from the router to said selected originating gateway;
- (d) parking the dialed number at the originating gateway;
- (e) finding an optimum terminating gateway to accept said call over said data network;
- (f) sending the dialed number from the first gateway to a second gateway over said data network; and
- (g) connecting the call to a terminal identified by the dialed number, wherein the dialed number represents a called telephone accessible by either the data network or a telephone network.

20. (original) The method for routing a telephone call as described in claim 19, further comprising the steps of acquiring the caller's number and determining if the caller is authorized.

21. (previously presented) The method of claim 20, wherein the step of determining if the caller is authorized, comprises:

- (a) transmitting the caller's number from the router to a computer;
- (b) accessing a database associated with the computer; and
- (c) comparing a caller's number to information stored in the database.

22. (original) The method for routing a telephone call as described in claim 20,

further comprising the step of sending an authorization to the router if the caller is authorized.

23. (original) The method for routing a telephone call as described in claim 20, further comprising the step of terminating the call if the caller is not authorized.

24. (original) The method for routing a telephone call as described in claim 19, further comprising the step of locating an optimum terminating gateway.

25. (previously presented) A method for routing a telephone call by a caller, comprising the steps of:

- (a) receiving a dialed number associated with the call and examining said dialed number by a router directly connected to a device initiating the call to determine whether the call shall be routed over a data network;
- (b) if yes, parking the dialed number at the router;
- (c) determining if the caller is authorized;
- (d) if the call is determined to be routed over said data network after said dialed number is examined, and if the caller is authorized, selecting one from plural first gateways each being capable of conveying said telephone call to said data network, sending the dialed number from the router to a said selected first gateway;
- (e) parking the dialed number by the selected first gateway;
- (f) sending the dialed number from the selected first gateway to a second gateway; and
- (g) connecting the call to a terminal identified by the dialed number, wherein the call may be completed either over the data network or a telephone network, depending upon which is more economical.

26. (original) The method for routing a telephone call as described in claim 25, further comprising the steps of acquiring the calling number by the router and transmitting the calling number from the router to a computer.

27. (original) The method for routing a telephone call as described in claim 25, further comprising the step of selecting a terminating gateway.

28. (original) The method for routing a telephone call as described in claim 25, further comprising the step of sending an authorization to the router if the caller is authorized.

29. (original) The method for routing a telephone call as described in claim 25, further comprising the step of terminating the call if the caller is not authorized.

30.-36 (canceled)

37. (previously presented) Apparatus of claim 1, further comprising means for authenticating said caller by an identifier of said caller if said telephone call is determined to be within the category, and for forwarding, after said caller is authenticated, a dialed number associated with said call to said selected originating gateway so as to route said telephone call through said selected originating gateway to said data network.

38. (previously presented) Apparatus of claim 37, further comprising means for setting up a first connection between said apparatus and said selected originating gateway for transmitting said identifier of said caller over said first connection to said selected originating gateway so as to be forwarded by said selected originating gateway to a computer over a second connection over said data network for authenticating said caller.

39. (previously presented) Apparatus of claim 38 further comprising means for forwarding said dialed number to said selected originating gateway through said first connection after said caller is authenticated.

40. (previously presented) A method of claim 7, further comprising the steps of authenticating the caller by an identifier of said caller if said particular property is present in said dialed telephone number, and forwarding, after said caller is authenticated, said dialed telephone number to said selected originating gateway.

41. (previously presented) The method of claim 40, further comprising the steps of setting up a first connection between said router and said selected originating gateway for transmitting said identifier of said caller over said first connection to said selected originating gateway so as to be forwarded by said selected originating gateway to a computer over a second connection over said data network for authenticating said caller.

42. (previously presented) The method of claim 41, further comprising the steps of forwarding said dialed telephone number to said selected originating gateway through said first connection after said caller is authenticated.

43. (previously presented) The method of claim 10, further comprising the steps of authenticating the caller by an identifier of said caller if said dialed number is within said predetermined class of numbers, and forwarding, after said caller is authenticated, said dialed number to said selected originating gateway.

44. (previously presented) The method of claim 43, further comprising the steps of setting up a first connection between said router and said selected originating gateway for transmitting said identifier of said caller over said first connection to said selected originating

gateway so as to be forwarded by said selected originating gateway to a computer over a second connection over said data network for authenticating said caller.

45.(previously presented) The method of claim 44, further comprising the steps of forwarding said dialed number to said selected originating gateway through said first connection after said caller is authenticated.

46.(previously presented) The network of claim 12, wherein said router is further programmed to authenticate a caller of said specific long distance call by an identifier of said caller after said specific call is determined to be transmitted over the packet switching network, and programmed to forward, after said caller is authenticated, a dialed number associated with said specific call to said selected originating gateway.

47.(previously presented) The network of claim 46, wherein said router is programmed to set up a first connection between said router and said selected originating gateway for transmitting said identifier of said caller over said first connection to said selected originating gateway so as to be forwarded by said selected originating gateway to a computer over a second connection over said data network for authenticating said caller.

48. (previously presented) The network of claim 47, wherein said router is further programmed to forward said dialed number to said selected originating gateway through said first connection after said caller is authenticated.

49. (previously presented) The method of claim 19, further comprising the steps of authenticating the caller by an identifier of said caller if said call is determined to be routed over said data network.

50.(previously presented) The method of claim 49, further comprising the steps of setting up a first connection between said router and said selected originating gateway for

transmitting said identifier of said caller over said first connection to said selected originating gateway so as to be forwarded by said selected originating gateway to a computer over a second connection over said data network for authenticating said caller.

51.(previously presented) The method of claim 50, wherein said dialed number is transmitted over said first connection to said selected originating gateway after said caller is authenticated.

52.(previously presented) The method of claim 25, wherein said caller is authenticated by an identifier of said caller after said call is determined to be routed over said data network.

53.(previously presented) The method of claim 52, further comprising the steps of setting up a first connection between said router and said selected first gateway for transmitting said identifier of said caller over said first connection to said selected first gateway so as to be forwarded by said selected first gateway to a computer over a second connection over said data network for authenticating said caller.

54. (previously presented) The method of claim 53, wherein said dialed number is sent from said router to said selected first gateway through said first connection after said caller is authenticated.